

REMARKS

The Official Action of March 13, 2008 and the art cited therein have been carefully considered. The amendments and remarks herein are considered to be responsive thereto. Claims 1-17, 19, 30 and 31 have been canceled and new claims 37 through 43 added their place. No new matter has been added. Any matter that has been canceled as a result of this amendment had been done without prejudice to re-file.

The title of the invention is objected to as not clearly indicating the invention to which the claims are directed. The title has been herein amended in accordance with the Examiner's suggestions.

Claims 2 and 4 are objected to for not further limiting claim 1. Claims 2 and 4 have been canceled without prejudice to refile.

Claims 1-4 and 6-9 are objected to because the words "said" and "claims" are capitalized. Claims 1-4 and 6-9 have been corrected to address this concern.

Claims 1-4 and 9 are rejected under 35 U.S.C 112, second paragraph, for failing to particularly define the invention. Specifically, the Examiner states that the terms "unsubstituted or substituted alkyl, alkenyl, etc., in the claims are not defined in the specification. However, on page 14, lines 14-16 and 21-23 it is stated, in so many words, that alkenyl & alkynyls may be substituted like the alkyl. The claims indicate that alkyl is optionally substituted with at least one substituent selected from R^b. Additionally, on pages 16 and 17 the specific substituents for alkyl, cycloalkyl and aryl are provided. The R^b substituents are equivalent to those provided on pages 16 and 17. Thus, one of ordinary skill in the art would readily appreciate what substituents are intended upon review of these sections of the specification.

Claims 1-4 and 9 are further rejected for the use of the term "heterocyclic". The Examiner states that the term is too broad. The claims have been amended to recite the number of carbon atoms, C₅₋₁₀ in the case of heterocyclyl and C₆₋₁₀ in the case of aryl to more precisely define the invention.

Claims 1-4 and 9 are rejected under 35 USC 102(b) as being anticipated by Bilodeau et al., US 6380203. The Examiner states that US 6380203 discloses a compound where R², R³ and R⁵=hydrogen, R⁴=methoxyphenyl and R¹=bromo. The currently amended claims to do provide for R¹ being a halogen.

Claims 1-4 and 9 are rejected under 35 USC 102(b) as being anticipated by Mustazza et al. The Examiner states that Mustazza et al. discloses a compound where R^2 , R^3 and R^5 =hydrogen, R^4 =4-ethylaminophenyl and R^1 =CN. The currently amended claims do provide for R^1 being CN.

Claims 1-4 and 9 are rejected under 35 USC 102(b) as being anticipated by Fraley et al. The Examiner states that Fraley et al. discloses a compound where R^2 , R^3 and R^5 =hydrogen, R^4 =4-pyridyl and R^1 =bromo. The currently amended claims do provide for R^1 being a halogen.

Claims 1-4 are rejected under 35 USC 103(a) as being unpatentable over Fraley et al. The Examiner states that the claimed invention claims compounds of formula (I) wherein R^2 , R^3 and R^5 = hydrogen, R^4 =4-methoxyphenyl and R^1 =4-methoxy-3-pyridyl. The Examiner further states that Fraley et al teaches compounds where R^2 , R^3 and R^5 = hydrogen, R^4 =4-methoxyphenyl and R^1 =3-pyridyl, see Table 1, page 2768, compound 2d of Fraley et al. However, a closer inspection of the claimed invention will reveal that when R^1 is a C_{5-10} heterocyclyl it must contain at least one substituent and that substituent cannot be a methoxy group. The substituents available for substitution on the C_{5-10} heterocyclyl are significantly different both structurally and chemically from the compounds disclosed in Fraley et al. Thus, a person of ordinary skill in the art would not expect the instantly claimed compounds.

Claims 1-4 are further rejected under 35 USC 103(a) as being unpatentable over US 6380203. The Examiner states that the claimed invention claims compounds of formula (I) wherein R^2 , R^3 and R^5 = hydrogen, R^4 =4-methoxyphenyl and R^1 =5-methoxy-3-pyridyl. The Examiner further states that US 6380203 teaches compounds where R^2 , R^3 and R^5 = hydrogen, R^4 =4-methoxyphenyl and R^1 =3-pyridyl, see column 10, example 1, lines 43-56 of US 6380203. As indicated in the immediately preceding paragraph, a closer inspection of the claimed invention will reveal that when R^1 is a C_{5-10} heterocyclyl it must contain at least one substituent and that substituent cannot be a methoxy group. The substituents available for substitution on the C_{5-10} heterocyclyl are significantly different both structurally and chemically from the compounds disclosed in Fraley et al. Thus, a person of ordinary skill in the art would not expect the instantly claimed compounds.

Claims 1-9 are rejected on the ground of statutory obviousness-type double patenting as being unpatentable over claim 1-3 of US Patent No. 6235741. The Examiner says that Applicants compound, 3-(3-pyridyl)-6-(4-methoxyphenyl)pyrazolo-(1,5-a)pyrimidine, is obvious over 3-(4-amino(3-pyridyl))-6-(4-methoxyphenyl)-pyrazolo(1,5-a)pyrimidine. The amino substituted compound is not specifically claimed by Applicants. Additionally, one of ordinary skill would not readily expect that a compound having an amino substitution versus a compound having a hydrogen substitution to be equivalent without experimentation. It is known in the art that the addition of a substituent such as an amino group could impart significantly different properties on a compound when compared to a hydrogen group. The two compounds are both structurally and chemically different and their activity as tyrosine kinase inhibitors cannot be predicted by merely observing the structure.

Claims 1-9 are further rejected on the ground of statutory obviousness-type double patenting as being unpatentable over claim 1-3 of US Patent No. 6245759. The Examiner says that Applicants compound, 1-(3-dimethylamino-propyl)-4-(3-thiophen-3-yl)pyrazolo(1,5-a)pyrimidin-6-yl-1H-pyridin-2-one, is obvious over (3-thiophen-3-yl)pyrazolo(1,5-a)pyrimidinyl-6-yl-1H-pyridin-2-one. Applicants do not specifically claim the unsubstituted pyridyl compound. Additionally, one of ordinary skill would not readily expect that these compounds would be equivalent without experimentation since they are structurally and chemically different. It is known in the art that the addition of a substituent such as a dimethylamino-propyl could impart significantly different properties on a compound when compared to no substitution. The two compounds are both structurally and chemically different and their activity as tyrosine kinase inhibitors cannot be predicted by merely observing the structure.

In light of the amendments and remarks herein Applicants believe the claims are in condition for allowance. The Examiner is respectfully requested withdraw the objections and 35 USC sections 112, 102(b), 103(a) and nonstatutory obviousness-type double patenting rejections and to contact the undersigned at the number below if this would expedite the allowance.

Respectfully submitted,

By: 

Sylvia A. Ayler

Reg. No. 36,436

Attorney for Applicant(s)

MERCK & CO., INC.

P.O. Box 2000

Rahway, New Jersey 07065-0907

(732) 594-4909

Date: April 1, 2008